Remarks

Reconsideration and withdrawal of the rejections set forth in the Final Office mailed August 1, 2006 and the Advisory Action dated December 20, 2007 are respectfully requested.

I. Rejection under 35 U.S.C. § 102

Claims 1-4, 6, 7, 11, 13, 16-21, 25, 26, 30, 31, and 35 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Ladner *et al.* (U.S. Patent No. 5,223,409).

Applicants respectfully traverse these rejections.

A. The Present Claims

The present claims relate to an expression vector for expressing a multimeric polypeptide anchored on a surface of a genetically replicable package formed by a host. The expression vector comprises a vector segment encoding a polypeptide sequence having (i) a first polypeptide segment, (ii) a second polypeptide segment having therein a cleavable peptide sequence cleavable by a proteolytic agent, and (iii) a third polypeptide segment having therein an anchoring peptide sequence for anchoring the multimeric polypeptide to said surface of the genetically replicable package. The second polypeptide segment is between the first polypeptide segment and the third segment. The cleavable peptide sequence is cleaved by the proteolytic agent, whereby the first segment associates with the third segment to form the multimeric polypeptide.

B. The Cited References

LADNER ET AL. relate to a method of obtaining a nucleic acid encoding a binding protein. In this method, a gene obtained by random mutagenesis of a limited number of codons is fused to a genetic element which causes the resulting chimeric expression product to be displayed on the outer surface of a genetic package (abstract). Genetic variation is achieved through variegation of DNA

yielding a mixture of DNA molecules encoding different but related potential binding proteins (see column 7, lines 50-54). The hybrid genes comprise a first DNA sequence which encodes a potential binding domain for the target of interest and second DNA sequence which encodes an outer surface protein to display the protein on the outer surface of the package.

C. Analysis

According to the M.P.E.P. § 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference".

While Ladner *et al.* describe tripartite polypeptides for display on the outer surface of a genetic package such as a phage, nowhere do Ladner *et al.* teach that a first segment associates with a third segment to form a multimeric polypeptide.

In Lardner, an initial protein binding domain (IPBD) is cleaved off a tripartide polypeptide, providing the opportunity for a different protein binding domain, present elsewhere in the tripartite polypeptide, to act as an anchor and phage-assembly signal; however,

> [o]nce the signal sequence is cleaved off, the IPBD is in the periplasm and the mature coat protein acts as an anchor and phage-assembly signal. It matters not that this fusion protein comes to rest anchored in the lipid bilayer by a route different from the route followed by the wild-type coat protein.

Column 57, lines 52-54, emphasis added. Clearly, the IPBD is released from the tripartite polypeptide, allowing a different portion of the polypeptide to function as an anchor. However, the cleaved IPBD does not reassociate with any portion of the tripartite polypeptide.

In contrast, the present claims explicitly require the subsequent association of two peptide segments following protease cleavage. For at least these reasons, Ladner *et al.* do not disclose each and every element of the present claims.

Withdrawal of the rejection is respectfully requested.

II Rejections under 35 U.S.C. § 103

Claims 1-4, 6, 7, 11, 13, 16-21, 25, 26, 29-31, and 35 were rejected under 35 U.S.C. § 103 as allegedly obvious over Ladner *et al.* and Goers *et al.* (U.S. Patent No. 4,867,973).

These rejections are respectfully traversed.

A. The Present Claims are described above.

B. The Cited References

LADNER ET AL. is described above.

GOERS ET AL. relate to antibody-therapeutic agent conjugates having a therapeutic agent covalently attached to an antibody or antibody fragment.

C. Analysis

According to the M.P.E.P. § 2143, "to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art references (or references when combined) must teach or suggest all the claim limitations."

The deficiencies of Ladner *et al.* are discussed above. In particular, Ladner *et al.* fail to teach that a first segment associates with a third segment to form a multimeric polypeptide.

Goers *et al.* is cited merely for teaching a urokinase peptide cleavage sequence, which in no way cures the deficiency of Ladner *et al.* in failing to meet each and every element of the present claims.

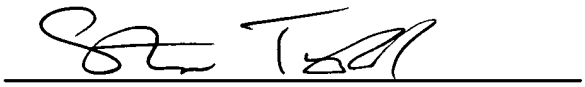
As the references, alone or in combination, fail to teach or suggest all the claim limitations, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103.

Conclusion

Applicants submit that the application is fully in condition for allowance and request withdrawal of the outstanding rejections. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned at (650) 838-4328.

Respectfully submitted

Date: February 1, 2007



Stephen Todd
Registration No. 47,139

Correspondence Address:
Customer No. 22918
Perkins Coie LLP
P.O. Box 2168
Menlo Park, California 94026
(650) 838-4300